

# Stanford

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## Jiyun Hong

Research Assoc-Experimental, SLAC National Accelerator Laboratory

### Publications

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#### PUBLICATIONS

- **Cation Incorporation into Copper Oxide Lattice at Highly Oxidizing Potentials.** *ACS applied materials & interfaces*  
Ostervold, L., Smerigan, A., Liu, M. J., Filardi, L. R., Vila, F. D., Perez-Aguilar, J. E., Hong, J., Tarpeh, W. A., Hoffman, A. S., Greenlee, L. F., Clark, E. L., Janik, M. J., Bare, et al  
2023
- **Elucidating the role of Fe-Mo interactions in the metal oxide precursors for Fe promoted Mo/ZSM-5 catalysts in non-oxidative methane dehydroaromatization** *CHEMICAL ENGINEERING JOURNAL*  
Hossain, M., Dhillon, G., Liu, L., Sridhar, A., Hiennadi, E. J., Hong, J., Bare, S. R., Xin, H., Ericson, T., Cozzolino, A., Khatib, S. J.  
2023; 475
- **Probing of the Noninnocent Role of P in Transition-Metal Phosphide Hydrogen Evolution Reaction Electrocatalysts via Replacement with Electropositive Si** *CHEMISTRY OF MATERIALS*  
Kong, S., Singh, P., Akopov, G., Jing, D., Davis, R., Perez-Aguilar, J., Hong, J., Lee, S. J., Viswanathan, G., Soto, E., Azhan, M., Fernandes, T., Harycki, et al  
2023
- **Temporal Ni K-Edge X-ray Absorption Spectroscopy Study Reveals the Kinetics of the Ni Redox Behavior of the Iron-Nickel Oxide Bimetallic OER Catalyst** *JOURNAL OF PHYSICAL CHEMISTRY C*  
Acharya, P., Hong, J., Manso, R., Hoffman, A. S., Kekedy-Nagy, L., Chen, J., Bare, S. R., Greenlee, L. F.  
2023
- **CO Oxidation on Ir-1/TiO<sub>2</sub>: Resolving Ligand Dynamics and Elementary Reaction Steps** *ACS CATALYSIS*  
Thompson, C. B., Liu, L., Leshchev, D. S., Hoffman, A. S., Hong, J., Bare, S. R., Unocic, R. R., Stavitski, E., Xin, H., Karim, A. M.  
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- **Observations of Ethylene-for-CO Ligand Exchanges on a Zeolite-Supported Single-Site Rh Catalyst by X-ray Absorption Spectroscopy.** *The journal of physical chemistry letters*  
Hoffman, A. S., Muller, O., Hong, J., Canning, G. A., Fang, C., Perez-Aguilar, J. E., Gates, B. C., Bare, S. R.  
2023: 4591-4599
- **Memory-dictated dynamics of single-atom Pt on CeO<sub>2</sub> for CO oxidation.** *Nature communications*  
Zhang, Z., Tian, J., Lu, Y., Yang, S., Jiang, D., Huang, W., Li, Y., Hong, J., Hoffman, A. S., Bare, S. R., Engelhard, M. H., Datye, A. K., Wang, et al  
2023; 14 (1): 2664
- **Dynamic Evolution of Palladium Single Atoms on Anatase Titania Support Determines the Reverse Water-Gas Shift Activity.** *Journal of the American Chemical Society*  
Chen, L., Allec, S. I., Nguyen, M., Kovarik, L., Hoffman, A. S., Hong, J., Meira, D., Shi, H., Bare, S. R., Glezakou, V., Rousseau, R., Szanyi, J.  
2023
- **Dynamic Tracking of NiFe Smart Catalysts using In Situ X-Ray Absorption Spectroscopy for the Dry Methane Reforming Reaction** *ACS CATALYSIS*  
Shah, S., Hong, J., Cruz, L., Wasantwisut, S., Bare, S. R., Gilliard-AbdulAziz, K.  
2023
- **Structure and Site Evolution of Framework Ni Species in MIL-127 MOFs for Propylene Oligomerization Catalysis** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*  
Yeh, B., Chheda, S., Prinslow, S. D., Hoffman, A. S., Hong, J., Perez-Aguilar, J. E., Bare, S. R., Lu, C. C., Gagliardi, L., Bhan, A.  
2023; 145 (6): 3408-3418

- **Nano-sized Metallic Nickel Clusters Stabilized on Dealuminated beta-Zeolite: A Highly Active and Stable Ethylene Hydrogenation Catalyst** *JOURNAL OF PHYSICAL CHEMISTRY C*  
Meloni, M., Hong, J., Hoffman, A. S., Holton, S., Kulkarni, A., Bare, S. R., Runnebaum, R. C.  
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- **Surface Fe clusters promote syngas reaction to oxygenates on Rh catalysts modified by atomic layer deposition** *JOURNAL OF CATALYSIS*  
Nathan, S. S., Asundi, A. S., Hoffman, A. S., Hong, J., Zhou, C., Vila, F. D., Cagnello, M., Bare, S. R., Bent, S. F.  
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- **Atomically Dispersed Platinum in Surface and Subsurface Sites on MgO Have Contrasting Catalytic Properties for CO Oxidation.** *The journal of physical chemistry letters*  
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- **Steering CO<sub>2</sub> hydrogenation toward C-C coupling to hydrocarbons using porous organic polymer/metal interfaces.** *Proceedings of the National Academy of Sciences of the United States of America*  
Zhou, C., Asundi, A. S., Goodman, E. D., Hong, J., Werghi, B., Hoffman, A. S., Nathan, S. S., Bent, S. F., Bare, S. R., Cagnello, M.  
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- **A Theory-Guided X-ray Absorption Spectroscopy Approach for Identifying Active Sites in Atomically Dispersed Transition-Metal Catalysts.** *Journal of the American Chemical Society*  
Chen, Y., Rana, R., Sours, T., Vila, F. D., Cao, S., Blum, T., Hong, J., Hoffman, A. S., Fang, C., Huang, Z., Shang, C., Wang, C., Zeng, et al  
2021
- **Unlocking the Catalytic Potential of TiO<sub>2</sub>-Supported Pt Single Atoms for the Reverse Water-Gas Shift Reaction by Altering Their Chemical Environment** *JACS AU*  
Chen, L., Unocic, R. R., Hoffman, A. S., Hong, J., Braga, A. H., Bao, Z., Bare, S. R., Szanyi, J.  
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- **Reduction and Agglomeration of Supported Metal Clusters Induced by High-Flux X-ray Absorption Spectroscopy Measurements** *JOURNAL OF PHYSICAL CHEMISTRY C*  
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- **Understanding Support Effects of ZnO-Promoted Co Catalysts for Syngas Conversion to Alcohols Using Atomic Layer Deposition** *CHEMCATCHEM*  
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